

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A plant for concentration of tomato juice, ~~wherein it comprises~~ said plant comprising:

an evaporator (1) of known type, provided with an external sleeve (2), in which a heating fluid circulates, and which surrounds a vertical tube bundle (3),

said vertical tube bundle arranged in a central part (1a) of the evaporator (1), and comprising in which tubes (3) tubes in which the tomato juice circulates, the tubes (3) being divided into a plurality of sectors (3a, 3b, 3c and 3d) all operating at a same temperature and pressure and in which the tomato juice circulates in succession;

an upper plate (4) and a lower plate (5), which, together with the sleeve (2), delimit the central part (1a), on which the upper plate (4) and the lower plate (5) ends of the tubes (3) are keyed in order so that the upper ends of the tubes open into an inlet zone (4a) of the evaporator in which the tomato juice is distributed (1), and the lower ends of the tubes (3) open into a bottom zone which is a separation chamber (5a) of the evaporator (1);

means for circulating (6a, 6b, 6e) of known type,
circulating members for removing the tomato juice from a one of
said plurality of sectors sector of the separating chamber (5a)
and sending the tomato juice to an inlet zone of a successive
sector one of said plurality of sectors;

at least one heat exchanger (7) of known type arranged
externally of the evaporator (1) and divided into a plurality of
sectors (7a, 7b, 7c) in each said sector of which sectors the
tomato juice exiting from a-the sector of tubes (3a, 3b, 3c) of
the evaporator (1) is heated to a same temperature as a
temperature present in the central part (1a) of the evaporator
(1), before being sent on to a successive sector.

2. (currently amended) The plant of claim 1, wherein it
said plant further comprises:

a compressor (8) of known type for aspirating steam from
the separation chamber (5a) of the evaporator (1), and for
compressing the steam and for introducing the steam into the
central part (1a) of the evaporator (1);

a gas turbine (9) of known type, powered by live steam
coming from a boiler (10) and powering the compressor (8);

wherein discharge steam from the gas turbine (9)
constituting constitutes a heating fluid necessary for operation
of the plant.

3. (currently amended) The plant of claim 2, wherein it
said plant further comprises:

 a steam ejector-(11) of known type,
 a primary fluid of which is comprising the discharge steam
coming from the gas turbine-(9),
 which wherein the steam ejector -(11) extracts heating
fluid from the central part -(1a) of the evaporator-(1), wherein
fluid exiting from the steam ejector -(11) constituting constitutes
the heating fluid for the heat exchanger-(7).

4. (currently amended) The plant of claim 1, wherein: a
temperature internal of the central zone -(1a) of the evaporator
is comprised between 72° and 80°C; a temperature internal of the
separation chamber -(5a)—of the evaporator -(1)—is comprised
between 67° and 75°C.